



Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. 60390-1A/JPW/GJG/NDP		Serial No. 10/718,411		
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicants: Arlindo Castelhana et al.				
				Filing Date November 20, 2003		Group		
U.S. PATENT DOCUMENTS								
Examiner Initial		Document Number		Date	Name	Class	Subclass	Filing Date if Appropriate
AW		10 4 9 7 4 5 1		5/27/04	Castelhana et al.			
FOREIGN PATENT DOCUMENTS								
		Document Number		Date	Country	Class	Subclass	Translation Yes No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)								
EXAMINER				DATE CONSIDERED				
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

Applicants: Arlindo L. Castelhana et al.  
Serial No.: 10/718,411  
Filed: November 20, 2003  
Exhibit A

[illegible]

Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark OfficeAtty. Docket No.  
60390-IB/JPW/GJG/JBCSerial No.  
Not Yet KnownINFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)

Applicants: Arlindo Castelhana et al.

Filing Date  
Herewith

Group

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate

## FOREIGN PATENT DOCUMENTS

SW	WO	9	4	1	9	3	4	9	9/1/94	PCT;				
	WO	9	4	2	4	1	3	6	10/27/94	PCT;				
	WO	9	5	1	1	6	8	1	5/4/95	PCT;				
	WO	9	5	1	8	6	1	7	7/13/95	PCT;				
	WO	9	5	1	9	7	7	4	7/27/95	PCT;				
	WO	9	5	1	9	9	7	0	7/27/95	PCT;				
	WO	9	5	2	0	5	9	7	8/3/95	PCT;				
	WO	9	6	1	9	4	7	8	6/27/96	PCT;				
	WO	9	7	0	2	2	6	6	1/23/97	PCT;				
	WO	9	7	0	5	1	3	8	2/13/97	PCT;				
	WO	9	7	3	3	8	7	9	9/18/97	PCT;				
	WO	9	8	0	7	7	2	6	2/26/98	PCT;				
	WO	9	8	0	8	3	8	2	3/5/98	PCT;				
	WO	9	8	2	2	4	6	5	5/28/98	PCT;				
	WO	9	8	2	9	3	9	7	7/9/98	PCT;				
	WO	9	8	5	7	6	5	1	12/23/98	PCT;				
	WO	9	9	0	6	0	5	3	2/11/99	PCT;				
	WO	9	9	3	3	8	1	5	7/8/99	PCT;				
	WO	9	9	4	2	0	9	3	8/26/99	PCT;				
	WO	9	9	6	2	5	1	8	12/9/99	PCT;				
	WO	0	1	3	9	7	7	7	6/7/01	PCT (Exhibit 1);				
	WO	02	0	5	7	2	6	7	7/25/02	PCT;				
	WO	03	0	4	8	1	2	0	6/12/03	PCT (Exhibit 2);				
	EP	0	3	2	2	2	4	2	6/28/89	EPO;				
	EP	0	5	1	4	5	4	0	11/25/92	EPO;				
	EP	0	6	8	2	0	2	7	11/15/95	EPO;				
	EP	0	7	2	9	7	5	8	9/4/96	EPO;				
SW	EP	0	7	7	3	0	2	3	5/14/97	EPO;				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER

A. H. J. J.

DATE CONSIDERED

1/4/06

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449								U.S. Department of Commerce Patent and Trademark Office						Atty. Docket No. 60390-IB/JPW/GJG/JBC						Serial No. Not Yet Known					
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)																		Applicants: Arlindo Castelhamo et al.							
												Filing Date Herewith						Group							
U.S. PATENT DOCUMENTS																									
Examiner Initial		Document Number								Date		Name						Class		Subclass		Filing Date if Appropriate			
FOREIGN PATENT DOCUMENTS																									
		Document Number								Date		Country						Class		Subclass		Translation Yes      No			
AJP		GB 0 9 1 5 3 0 3								1/9/63		Great Britain;													
		DE 3 1 4 5 2 8 7								5/19/93		Germany;													
		IN 0 1 5 7 2 8 0								2/22/86		India;													
AJP		JP 09 2 9 1 0 8 9								5/11/999		Japan;													
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)																									
AJP		Abbraccio M., et al., (1999) "Brain Adenosine Receptors as Targets for Therapeutic Intervention in Neurodegenerative Diseases", <u>Ann. NY. Acad. Sci.</u> , 890: 79-92;																							
		Banker, G.S. et al., <u>Modern Pharmaceutics</u> , 3 <sup>rd</sup> ed., Marcel Dekker, New York, 1996, page 596;																							
		Barrett, R.J. (1996) "Realizing the Potential of Adenosine-Receptor-Based Therapeutics" <u>Proc. West. Pharmacol. Soc.</u> 39: 61-66;																							
		Barrett, R.J. et al., "N-0861 selectively antagonizes adenosine A1 receptors in vivo" <u>European J. Pharmacology</u> (1992) 216: 9-16;																							
		Brand A., et al., (2001) "Adenosine A1 and A3 receptors mediate inhibition of synaptic transmission in rat cortical neurons", <u>Neuropharmacology</u> , 40: 85-95;																							
		Bundy, G.L. et al. (1995) "Synthesis of Novel 2,4-Diaminopyrrolo-[2,3-d]pyrimidines with Antioxidant, Neuroprotective, and Antiasthma Activity" <u>J. Med. Chem.</u> 38: 4161-4163;																							
		Campbell, R.M. et al., "Selective A <sub>1</sub> -Adenosine Receptor Antagonists Identified Using Yeast <i>Saccharomyces Cerevisiae</i> Functional Assays" <u>Bioorg. &amp; Med. Chem. Lett.</u> (1999) 9(16): 2413-2418;																							
		Chen, Y. L., et al., "Synthesis and Oral Efficacy of a 4-(Butylethylamino)pyrrolo[2,3-d]pyrimidine: A Centrally Active Corticotropin-Releasing Factor <sub>1</sub> Receptor Antagonist", (1997) <u>J. Med. Chem.</u> , 40: 1749-1754;																							
		Cummings, J. et al., "Antagonism of the Cardiodepressant Effects of Adenosine during Acute Hypoxia" <u>Academic Emergency Medicine</u> (2000), 7(8): 618-624;																							
		DeNinno, M.P. in <u>Annual Reports in Medicinal Chemistry</u> , Vol. 33, (Academic Press: San Diego, 1998), pp. 111-120;																							
		Dhainaut, A. et al., "New Purines and Purine Analogs as Modulators of Multidrug Resistance" <u>J. Med. Chem.</u> (1996) 39: 4099-4108;																							
		Dooley, M.J. et al., "Theoretical Structure-Activity Studies of Adenosine A <sub>1</sub> Ligands: Requirements for Receptor Affinity" <u>Bioorg. Med. Chem.</u> (1996), 4(6): 923-934;																							
		Feoktistova, I. et al., (1998) "Adenosine A <sub>2B</sub> receptors: a novel therapeutic target in asthma?", <u>TIPS</u> 19: 148-153;																							
AJP		Gao, E. et al., "Adenosine A <sub>1</sub> Receptor Antagonist Prolongs Survival in the Hypoxic Rat" <u>J. Cardiovascular Pharm.</u> (2001) 38: 384-394;																							
EXAMINER												DATE CONSIDERED													
AJP												1/4/06													
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.																									

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. 60390-IB/JPW/GJG/JBC		Serial No. Not Yet Known	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicants: Arlindo Castelhana et al.			
				Filing Date Herewith		Group	
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation Yes No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		Hart, H. et al., <u>Organic Chemistry, A Short Course</u> , (Houghton Mifflin: 1995), p. 121;					
		Iwamura, H. et al. (1996) "Quantitative Aspects of the Receptor Binding of Cytokinin Agonists and Antagonists" <u>J. Med. Chem.</u> , 26: 838-844;					
		Jacobson K.A., et al., (1998) "Adenosine A3 receptors: novel ligands and paradoxical effects", <u>TiPS</u> , 19:184-191;					
		Jacobson K.A., et al., (1997) "Pharmacological Characterization of Novel A3 Adenosine Receptor-selective Antagonists", <u>Neuropharmacology</u> , 36 (9): 1157-1165;					
		Jorgensen, A. et al. (1985) "Synthesis of 7H-Pyrrolo[2,3-d]pyrimidin-4-amines" <u>Liebigs. Ann. Chem.</u> , Pages 142-148;					
		Kaiser, S.M. and R.J. Quinn (1999) "Adenosine receptors as potential therapeutic targets" <u>Drug Discovery Today</u> 4(12): 542-551;					
		Kiichiro, K. et al. "Synthesis of pyrazinecarboxylic acid derivs. - (II) derivs. of 3-aminopyrazinecarboxylic acid" (1961) <u>Yakugaku Zasshi</u> 81: 1650-1653;					
		Lee T., et al., (1999) "Protective effects of renal ischemic preconditioning and adenosine pretreatment: role of A1 and A3 receptors", <u>72<sup>nd</sup> Scientific Sessions of the American Heart Association</u> , Atlanta, GA, p.197;					
		Lee T., et al., (2000) "Protective effects of renal ischemic preconditioning and adenosine pretreatment: role of A1 and A3 receptors", <u>Am. J. Physiol. Renal Physiol.</u> , 278: F380-F387;					
		Marx, D. et al. (2001) "Therapy of Bronchial Asthma with Adenosine Receptor Agonists or Antagonists" <u>Drug News Perspect.</u> 14(2): 89-100;					
		Mautner, H.G., (1961) "Potential Deoxyribonucleic Acid Cross-linking Agents. 8,8'-Bispurines", <u>J. Org. Chem.</u> 26(6):1914-1917;					
		Muller, C. E. et al. (1990) "7-Deaza-2-phenyladenines: Structure-Activity Relationships of Potent A1 Selective Adenosine Receptor Antagonists" <u>J. Med. Chem.</u> , 33: 2822-2828;					
EXAMINER		DATE CONSIDERED		1/4/06			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. 60390-IB/JPW/GJG/JBC		Serial No. Not Yet Known	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicants: Arlindo Castelhana et al.			
				Filing Date Herewith		Group	
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation Yes No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		Muller, C.E. et al. (1996) "Chiral Pyrrolo[2,3-d]pyrimidine and Pyrimido[4,5-b]indole Derivatives: Structure-Activity Relationships of Potent, Highly Stereoselective A <sub>1</sub> -Adenosine Receptor Antagonists" <u>J. Med. Chem.</u> , 39: 2482-2491;					
		Muller, C. E. and Stein, B. (1996) "Adenosine Receptor Antagonists: Structures and Potential Therapeutic Applications", <u>Current Pharmaceutical Design</u> , 2: 501-530;					
		Muller, C. E. (1997) "A <sub>1</sub> -Adenosine Receptor Antagonists", <u>Exp. Opin. Ther. Patents</u> 7(5): 419-440;					
		Muller, C. E., et al., (1997) "Synthesis and Structure-Activity Relationships of 3,7-Dimethyl-1-propargylxanthine Derivatives, A <sub>2A</sub> -Selective Adenosine Receptor Antagonists", <u>J. Med. Chem.</u> , 40: 4396-4405;					
		Nishiyama, A. et al., "Adenosine A <sub>1</sub> Receptor Antagonist KW-3902 Prevents Hypoxia-Induced Renal Vasoconstriction" <u>J. Pharm. Exp. Ther.</u> (1999), 291: 988-993;					
		Nyce, J. W. and Metzger, J.W., (1997) "DNA antisense therapy for asthma in an animal model", <u>Nature</u> , 385: 721-725;					
		Pichler, H. et al. "Synthese von 7-unsubstituierten 7H-Pyrrolo[2,3-d] pyrimidinen", (1986) <u>Liebigs Ann. Chemie.</u> , 9: 1485-1505;					
		Seela, F., and Lupke, U., "Mannich-Reaktion am 2-Amino-3,7-dihydropyrrolo [2,3-d] pyrimidin-4-on, dem Chromophor des Ribonucleosids "Q" (1977) <u>Chem. Ber.</u> 110: 1462-1469;					
		Shan, Daxian et al., <u>J. Pharmaceutical Sci.</u> , (1997) 86:765-767;					
		Szkotak, A.J. et al., "Regulation of K <sup>+</sup> current in human airway epithelial cells by exogenous and autocrine adenosine" <u>Am. J. Physiol. Cell Physiol.</u> (2001), 281: C1991-C2002;					
		Venugopalan, B. et al. (1998) "Synthesis of 6,7-Dimethoxypyrimido[4,5-b]-indoles as Potential Antihypertensive Agents" <u>J. Heterocyclic Chem.</u> , 25: 1633-1639;					
		Welch, W.J. "Adenosine type 1 receptor antagonists in fluid retaining disorders" <u>Expert Opin. Investig. Drugs</u> (2002), 11(11): 1553-1562;					
		West, R. A. et al. (1961) "2-Alkyl(aryl)-and 2,7-Dimethyl-4-substituted Aminopyrrolo[2,3-d]pyrimidines" <u>J. Org. Chem.</u> , 26: 3809-3812;					
EXAMINER	A. L. Pryor		DATE CONSIDERED		1/4/88		
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

<b>Form PTO-1449</b>		<b>U.S. Department of Commerce Patent and Trademark Office</b>		Atty. Docket No. <b>60390-IB/JPW/GJG/JBC</b>		Serial No. <b>Not Yet Known</b>	
<b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)				Applicants: <b>Arlindo Castelhana et al.</b>			
				Filing Date <b>Herewith</b>		Group	

  

U.S. PATENT DOCUMENTS									
Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate			
<div style="font-family: cursive; font-size: 1.2em; margin-bottom: 10px;">AWP</div> <div style="border-left: 1px solid black; height: 100px; margin-left: 10px;"></div> <div style="font-family: cursive; font-size: 1.2em; margin-top: 10px;">AWP</div>	20 02 00 28 7 8 2	3/7/02	Castelhana et al. (Exhibit 3, claims only);						
	20 02 00 58 6 6 7	5/16/02	Castelhana et al. (Exhibit 4, claims only);						
	20 03 00 36 5 4 5	2/20/03	Castelhana et al. (Exhibit 5, claims only);						
	20 02 00 94 9 7 4	4/17/03	Castelhana et al. (Exhibit 6, claims only);						
	20 03 00 73 7 0 8	4/17/03	Castelhana et al. (Exhibit 7, claims only);						
	09 4 5 4 0 7 4	12/2/99	Castelhana et al. (Exhibit 8, claims only);						
	09 4 5 4 0 7 5	12/2/99	Castelhana et al. (Exhibit 9, claims only);						
	10 0 1 0 0 9 2	11/30/01	Castelhana et al.;						
	20 03 00 45 5 3 6	3/6/03	Castelhana et al. (Exhibit 10, claims only);						
	FOREIGN PATENT DOCUMENTS								
Document Number	Date	Country	Class	Subclass	Translation				
					Yes	No			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									
<div style="font-family: cursive; font-size: 1.2em; margin-bottom: 10px;">AWP</div> <div style="border-left: 1px solid black; height: 100px; margin-left: 10px;"></div> <div style="font-family: cursive; font-size: 1.2em; margin-top: 10px;">AWP</div>	Williams, E. F. et al., "Nucleoside transport sites in a cultured human retinal cell line established by SV-40 T antigen gene", (1994) <u>Current Eye Research</u> , 13: 109-118;								
<div style="border-left: 1px solid black; height: 100px; margin-left: 10px;"></div>	Wolff, Manfred E., <u>Burger's Medicinal Chemistry and Drug Discovery</u> , 5 <sup>th</sup> ed., Volume I: Principles and Practice, John Wiley & Sons, 1995, pages 975-977;								
<div style="border-left: 1px solid black; height: 100px; margin-left: 10px;"></div>	Woods, C. L. and Blazynski, C. (1991) "Characterization of Adenosine A <sub>1</sub> -receptor Binding Sites in Bovine Retinal Membranes", <u>Experimental Eye Research</u> , 53: 325-331; and								
<div style="font-family: cursive; font-size: 1.2em; margin-top: 10px;">AWP</div>	Zhao, Z. et al., "Bioactivation of 6,7-Dimethyl-2,4-di-1-pyrrolidinyl-7H-pyrrolo[2,3-d]pyrimidine (U-89843) to Reactive Intermediates that Bind Covalently to Macromolecules and Produce Genotoxicity" <u>Chem. Res. Toxicol.</u> , (1996) 9: 1230-1239.								
EXAMINER	<i>Altan Pryor</i>		DATE CONSIDERED <i>1/9/06</i>						
<p><small>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small></p>									